

REMARKS

Reconsideration and allowance of the above-identified application are respectfully requested in view of the foregoing amendments and the following remarks. Claims 2-6 are cancelled without prejudice to the claimed subject matter. Claim 1 is currently pending. Claims 1 is amended. No new matter is added.

Applicants request that the Office use attorney docket number 3448-103 in reference to this application.

The Specification is amended to remove references to FIGS. 14 and 15. The Drawings are amended to remove FIGS. 14 and 15.

FIGS. 3, 9, 10a, and 10b are amended. No new matter is added. FIG. 3 is amended to include reference number 82 which is supported at least by para. [0016]. FIG. 9 is amended to more clearly show the ends of lead lines. FIG 10a is amended to swap reference numbers 44 and 54 and supported at least by para. [0028]. FIG. 10b is amended to include reference number 52 and to make the arrow between references 58 and 59 bidirectional. This amendment is supported at least by para. [0028].

Claim 1 is amended to include a limitation of “a display driving portion directly connected to said display and a touch screen driving portion constructed by respective separate PCBs (printed circuit boards)” and recite “an interface medium for electrically connecting said board of said display driving portion and said board of said touch screen driving portion” and “wiring on said touch screen configured such that it is drawn out from said touch screen and comes into contact with said board for said display driving portion.” Support for these amendments is found, inter alia, in the description of the application in FIGS. 11-13 and paras [0054]-[0055].

FLAT PANEL DISPLAY WITH INPUT DEVICE

[0001] This invention claims the benefit of priority to Korean Patent Application No. 2001-1608 filed January 11, 2001 and Korean Patent Application No. 2001-15850 filed March 27, 2001. The present invention relates to a flat panel display, and more particularly, a flat panel display with an input device wherein its assemblability is enhanced and its failure rate is lowered by connecting, through a circuit, a touch screen driving portion and a display driving portion, which are constructed by separate control boards, and wherein signal distortion from its wiring can be reduced by simplifying the wiring. In addition, the present invention relates to reduction of signal distortion in an input device or a flat panel display and to obtainment of economic benefit in view of its manufacture by constructing a display driving board and a touch screen driving board on the identical printed circuit board (PCB).

BACKGROUND AND PRIOR ART

[0002] A touch screen has been known as an input device incorporated into or added to a computer, a portable transmitter, a spherical or aspherical displaying apparatus, a personal digital assistant (PDA), or the like. Although the touch screen (touch panel) is one input devices, it has features that its input operation is simple, there is little possibility of wrong operation, and it is possible to input characters with hands, as compared with the other input devices such as a mouse or a keyboard.

[0003] FIG. 1 is a sectional view showing the basic constitution of a resistive touch screen 10. An upper substrate 20 and a lower substrate 30 are structurally bonded by an adhesive 50 having thickness of 75 to 200 μ m with transparent conductive films 40 thereof faced to each other. The upper substrate 20 comes into contact with the lower substrate 30 by pressure applied upon depression for input. The upper substrate 20 is made of a PET film or a thin glass sheet, which is flexible.

Objections to the Drawings

The drawings were objected to under 37 CFR § 1.83(a). The Examiner asserted that features of claim 2 were not shown in the drawings. Claim 2 has been cancelled without prejudice to the claimed subject matter and, therefore, the objection is moot.

The drawings were objected to because the Examiner asserted that FIG. 11 was not consistent with FIGS. 14 or 15. FIGS. 14 and 15 have been deleted from the application and, therefore, this objection is moot.

Objections to Claims 1 and 2

Claim 1 was objected to under 37 CFR § 1.75(a). The Examiner asserted that lines 9 and 10 of the claim were inconsistent with "the last two lines of claim 1 and with the disclosure, specifically fig. 11." Claim 1 has been amended according to the Examiner's suggestion and Applicants respectfully request that the objection be withdrawn.

Claim 2 was objected to because the Examiner asserted it contained an informality. Claim 2 has been cancelled without prejudice to the claimed subject matter and, therefore, the objection is moot.

Claim Rejections under 35 U.S.C. § 103

Claims 2-6 were rejected under 35 U.S.C. § 103(a). Applicants have cancelled claims 2-6 without prejudice to the claimed subject matter and, therefore, the rejection is moot.

Allowable Subject Matter

The Examiner indicated that claim 1 would be allowable if amended to overcome the objection set forth in the Office Action. Applicants submit that the amendment to claim 1 overcomes the objection and recites at least the "wiring on said touch screen configured such that it is drawn out from said touch screen and comes into contact with said board for said display

driving portion" limitation of the uniquely distinct feature identified by the Examiner.

Therefore, Applicants request that the objection be withdrawn and claim 1 passed to issue.

CONCLUSION

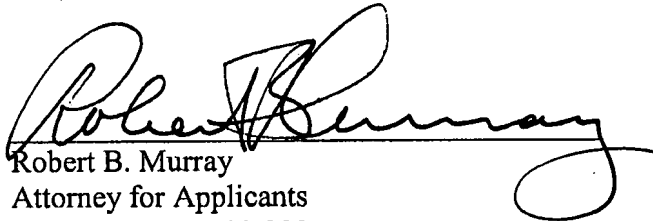
In view of the foregoing amendments and remarks, Applicants respectfully submit that each of the presently pending claims in this application is in condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw outstanding rejections of claims and objections and to pass this application to issue. If it is determined that a further telephone conference with the undersigned would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event that this response is not timely filed, Applicant hereby petitions for an appropriate extension of time and requests that the corresponding fee be charged to Deposit Account No. 02-2135.

The Commissioner is hereby authorized to charge any fees and to credit any overpayments that may be required by this paper under 37 C.F.R. §§ 1.16 and 1.17 to Deposit Account No. 02-2135.

Respectfully submitted,

By



Robert B. Murray
Attorney for Applicants
Registration No. 22,980
ROTHWELL, FIGG, ERNST & MANBECK, p.c.
Suite 800, 1425 K Street, N.W.
Washington, D.C. 20005
Telephone: (202)783-6040